An
Inaugural Dissertation

Submitted
To
The Faculty of
The University of Pennsylvania
For the Degree of
Doctor of Medicine
By
William D. Knox
Of
Virginia

Passed March 24 1824
W. H.
Dean

On Gastritis.

Among the diversified forms of disease to which mankind is subject, there is none perhaps, which requires in its treatment, more promptitude and skill, than Gastritis: inflammation seated in organs less essential to life, may run its course, & terminate favourably, without the assistance of art, but, being here, located (as it were) at "the root of the tree of life" its rapid career is only to be checked by by immediate recourse to the most active remedies, but however vigourously, and promptly its progress may be opposed, the Physician will often be compelled to mourn at the impotence of his art, when contending with this most formidable disease. Gastritis has been divided by Cullen into two species, Phlegmonous, & Erythematic

according to the coat, in which the disease may be seated, this division however, is of no practical utility. it has been more properly divided by Professor Chapman, into Idiopathic & Symptomatic.

The Causes of this disease, are naturally divided into those, which act primarily on the stomach, & those which act through the medium of the general system.

among the first, are, poisonous, or acrid substances taken into the stomach, large draughts of any cold liquid, when the body is much heated, the abuse of ardent spirits, and distending the organ by large quantities of food, of difficult digestion. it may likewise be occasioned by external violence, as falls, Blows &c.

Among the causes which act through the medium of the system, may be reckoned

misplaced gout, repelled exanthemata, and inflammation extending from neighbouring parts to the stomach — the long continued application of Cold, to the inferior extremities, is also, an occasional Cause of the disease.

The symptoms of Gastritis, are peculiar, and well defined. It commences, with an indescribable sensation of wretchedness in the region of the stomach, attended by constant nausea, & occasional vomiting, with a peculiar gnawing pain, great anxiety, restlessness, & despondency, slight sensations of Chilliness, succeeded by flushings of heat, & partial sweats. The pulse, that unerring guide, in most other diseases, gives here, but little evidence, of the mischief going on within, it is frequent, small, & somewhat compressible. As the disease

advances, a new train of symptoms develope themselves. The pain becomes acute, and lancinating, the vomiting unremitting, spasms of the stomach occur, the pulse, hard, chorded, & diminutive, & the vital energies completely prostrated, the abdomen is now considerably distended, & the Epigastrium acutely sensible to the touch. These symptoms being allowed to proceed, are soon followed by others of a different nature. there is considerable diminution of pain, the pulse becomes more feeble, & intermitting, the extremities cold, cold clammy sweats break out, hickup, & vomiting of a dark coloured matter succeed, & death soon closes the appalling scene. The symptoms above, are those, commonly to be met with in Gastritis, but there are others, of an anomalous nature, which sometimes occur. Pro-

Professor Chapman, while lecturing on this subject, mentioned cases, which had occurred within his own knowledge, in which the only symptom, was pain & inflammation in the great toe, others in which the pain was in the groin, He has likewise observed all the symptoms of Hydrophobia, to be present in this disease & again in other cases, paralysis of the superior extremities.— Our surprise at these very curious, & interesting facts, will, however, in a great measure cease, when we reflect on the various, & multiplied sympathies, existing between this organ, & every other part of the system.—

Most satisfactorily will the pathology of Gastritis, accord with the symptoms which have been enumerated above. In the commencement of the disease, the morbid impression being made upon the mucus tissue

of the Stomach, we see displayed, the evidences of mucus inflammation; the frequent & somewhat oppressed, but not hard or chorded pulse, the nausea, the partial sweats, & the pain, rather of an indescribable, & foreboding, than of an acute lancinating nature, are features, which by the practical Physician, cannot easily be mistaken. Intimately connected by vascular attachment, the muscular, & serous tissues become speedily involved, and we progressively behold, the alarming spasms, indicative of irritation of the former structure, and the acute lancinating pain, with the chorded, quick pulse, so characteristic of inflammation of the latter membrane.—

Post mortem examinations, present all the various phenomena of inflammation, the mucus membrane is sometimes

found very red, with spots of extravasated blood; or a coat of coagulated lymph thrown out on its surface, on other occasions, inflammation is indicated by small streaks, presenting a radiated or stellated appearance, or we see erosions, ulceration, thickening of the coats, and even gangrene with now & then, schirrhus of the pylorus. Very often the blush of inflammation is altogether absent, the blood, receeding from the capillaries at the moment that death occurs, and structural derangement alone, denotes the ravages of the disease. It is of no small importance, to distinguish accurately, the evidences of genuine Gastritis, from the appearances, which are exhibited upon dissection, in the case of criminals, or any persons who have suffered a sudden and violent death. To this subject, much atten=

tion has of late, been devoted, and the diagnostics, are accurately laid down. In the latter instances, there are none of the marks of continued inflammation to be perceived, there is merely congestion & turgescence, in the vessels of the organs, and simply bearing in mind, that the blush of inflammation, does not, invariably, prove that this derangement has occured, a little discrimination will enable us to decide positively, upon the nature of the case.—

The prognosis, in this disease, is, for the most part, unfavourable, when it has been allowed to proceed, without making use of the proper remedies, in its early stage, or, when those remedies have not had the desired effect— When the pulse becomes intermitting, feeble, quick, & almost imperceptible, attended by cold clammy sweats, vomiting of a dark

matter, hickup, & low delirium, we may be well assured that death is at hand. — It is favourable, when we are enabled to calm the irritability of the organ, the debility not very great, the pulse becoming fuller, & softer, the pain, & soreness gradually abating, & the heat of the body natural.

In the treatment of this disease there are two principal indications to be kept in view — the first, to combat inflammation, the second, to calm the irritability of the stomach. — To fulfill the first of these, the lancet, is the only hope of the practioner — it is at this important moment, that he must take into view, the vast importance of the organ affected, & the great tendency which the disease has, to proceed, with rapid strides, to a fatal termination; if from the nature of the symptoms, or a mistaken view of the case, he

hesitates to employ the remedy, in its full extent, he will, in a very short time, be convinced, that no effort of his, however well directed, will be sufficient to atone for his fatal error. Being called in the early stage, we should, immediately, (without regard to the apparent debility, or the state of the pulse, which, as I have said, is here not to be depended on,) abstract twenty or thirty ounces of blood; in a short space of time, we will find the pulse becoming more full & strong, & the symptoms of ordinary inflammation more fully developed. As soon as this takes place, the bleeding, to the same, or even greater amount, should be repeated, and this practice continued, as long as the symptoms demand it, without regard to the quantity already drawn, but be governed alone, by the effect, produced on the

system. While steddily pursuing the means above mentioned, we are not to loose sight of the advantages to be gained, by the local abstraction of blood - to answer this purpose, twenty or thirty leeches, should be applied to the epigastrium, and suffered to remain, untill they become filled, & drop off - they are here, infinitely preferable to the application of Cups - as they produce much less pain & inconvenience to the patient. The bowels should now be thoroughly evacuated, by means of injections, they should consist of articles of a mild nature, be frequently repeated, & in considerable quantities. Having by these means, subdued, the violence of the disease, a blister large enough to cover the whole region of the stomach, should be had recourse to; it is a mistaken idea, to apply small blisters in these cases; large ones

cecate very little more pain, & the advantage derived from them, much more decisive, even admitting that they are more painful, our object is, to remove a formidable disease, & no hesitation should be experienced in the employment of them.

Our next endeavour should be, to calm the irritability of the stomach, which is to be attempted, by the administration of very small quantities of Lime Water & new milk, if this fails. minute doses of the acetate of Lead may be tried. Calomel in very small quantities has succeeded in these cases, when other articles have failed. Should we not be able to attain our object by these means, the warm bath, is a most powerful remedy, & should be had immediate recourse to. it will frequently produce a pleasant glow on the skin, excite its healthy action,

calm the irritability of the stomach, & compose the patient to sleep.— Anodyne injections, will be found extremely serviceable, at this stage of the disease, if we cannot by the means already mentioned, succeed in allaying the irritability of the organs, they should not, however be administered, in the early stage of the disease, as they would doubtless tend, to aggravate all the distressing symptoms.—

Having, by the use of the remedies, already mentioned, accomplished, our intention, we should next give some purgative, to cleanse thoroughly, the alimentary canal, the best article for this purpose, is Calomel, which from the smallness of its bulk, is not so apt to offend the stomach, & will commonly act with sufficient promptitude & energy.— Should it however, fail to do so, it should be followed by small, & frequently

repeated doses, of a solution of Epsom salts, this latter article, notwithstanding its nauseous taste, will frequently remain on the stomach, when other medicines are rejected.

By following the practice, above described, we will most generally succeed in effecting a cure in ordinary cases of Gastritis. but in those cases, of the disease, brought on by poisons, it is obvious that the first indication, is, to evacuate the stomach; & afterwards, to treat the case, on the principles already mentioned; modified however, by the particular article which may have produced the mischief.

If, notwithstanding all our efforts to the contrary, symptoms of gangrene supervene, we must then resort to opium, in large doses; the spirit of Turpentine, has also been highly recommended by Professor Chapman in this state of the disease. The diet, to be recom=

mended, for a patient recovering from an attack of this disease, should be of the mildest & least stimulating nature, & should be taken in small quantities at a time. The Drinks, should be pure water, toast water, or very weak lemonade, moderately warmed.

And

Relief Fund

pay on

Vouchers.

by

Relief Fund of Virginia

Nov. 6th 1871

Dont Use